

Breastfeeding simulator

Country of origin | People's Republic of China

Health problem addressed

Breastfeeding is one of the most effective ways to ensure child health and survival. Globally, about 800 000 children could be saved annually if every child were optimally breastfed. Globally, less than 40% of infants under six months of age are exclusively breastfed.

Product description

The product is intended to be worn by people. Along with an abstract exterior, the design enables both male and female health workers and trainers to feel comfortable while allowing an interactive role-play and “hands-on” demonstrations and practice. When the user performs manual milk expression techniques, the breastfeeding simulator provides positive feedback by releasing droplets of water. The product contains two 500 ml bags in a skin-like neoprene textile that the user refills with water between sessions. These bags supply the liquid for the feedback mechanism and provide a realistic feeling of postpartum breasts.

Developer's claims of product benefits

Existing solutions provide realism and feedback relative to the learning goals, but are costly (> 500 USD) and not portable. There are textile models that enable communication training through role-play, but are lacking in realism and feedback when the correct technique is applied. This solution provides anatomical realism, feedback, and training on communication skills through role-play at an affordable cost for large-scale implementation of training programs.

Suitability for low-resource settings

The product is intended for large-scale deployment of maternal and child health education programs. It is highly affordable so that NGOs can purchase large quantities for large-scale classroom learning. It is not only a demonstration tool, but also meant for individuals to role-play and practice. It is designed to be highly mobile, so that trainers can easily move it to different training sites and facilities for teaching.

Operating steps

Fill bags with 500ml of water each. Use belt straps to secure to body. Practice skin-to-skin care or manual milk expression. Let the simulator be available for retraining, or empty water bags for convenient transport.

Regulatory status

Although the simulator does not require regulatory approval, it has been tested according to the manufacturer's and developers' internal requirements and quality standards (lifetime testing, durability, material compatibility, etc.).

Future work and challenges

Future work involves large-scale deployment of maternal and child health education programs

Use and maintenance

User: Intended to be used by Physician, Midwife or Nurse for Training Purposes

Training: Various NGOs will provide training, integrated as part of larger maternal and child health training programs.

Maintenance: Wipe down, and filling of water tank, after and before each day of use.

Environment of use

Setting: Can be used in any setting or level of healthcare facility

Facility requirements: Clean water supply

Product specifications

Weight (kg): 300mm x 270mm x 170mm

Dimensions: 0.29

Consumables: None

Lifetime: 3 years (at least 3,000 cycles)

Retail price (USD): 58

Year of commercialization: 2014

Currently sold in: It is offered on a not-for-profit price to the 75 countries that have been identified by UN as focus countries relative to MDG 4 and 5.

